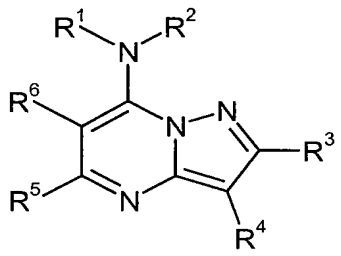
Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently amended) A pyrazolopyrimidine of the formula



(I)

in which

R^1 represents optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl or optionally substituted heterocyclyl,

R^2 represents hydrogen or alkyl, or

R^1 and R^2 together with the nitrogen atom to which they are attached represent an optionally substituted heterocyclic ring,

R^3 represents hydrogen or alkyl,

R^4 represents optionally substituted alkenyl or optionally substituted alkynyl,

R^5 represents halogen, ~~CN~~ cyano, alkyl, alkoxy or alkylthio and

R^6 represents alkyl, cycloalkyl or optionally substituted aryl.

2. (Currently amended) ~~The~~ A pyrazolopyrimidine ~~of the formula (I) as claimed in~~ according to claim 1 in which

R^1 represents alkyl having 1 to 6 carbon atoms which ~~may be~~ is optionally mono- to pentasubstituted by identical or different substituents selected from the group consisting of halogen, cyano, hydroxyl, alkoxy having 1 to 4 carbon atoms and cycloalkyl having 3 to 6 carbon atoms, or

R^1 represents alkenyl having 2 to 6 carbon atoms which ~~may be~~ is optionally mono- to trisubstituted by identical or different substituents selected from the group consisting of halogen, cyano, hydroxyl, alkoxy having 1 to 4 carbon atoms and cycloalkyl having 3 to 6 carbon atoms, or

R^1 represents alkynyl having 3 to 6 carbon atoms which ~~may be~~ is optionally mono- to trisubstituted by identical or different substituents selected from the group consisting of halogen, cyano, alkoxy having 1 to 4 carbon atoms and cycloalkyl having 3 to 6 carbon atoms, or

R^1 represents cycloalkyl having 3 to 6 carbon atoms which ~~may be~~ is optionally mono- to trisubstituted by identical or different substituents selected from the group consisting of halogen and alkyl having 1 to 4 carbon atoms, or

R^1 represents saturated or unsaturated ~~heterocyclyl~~ heterocycle having 5 or 6 ring members and 1 to 3 heteroatoms, ~~such as~~

~~nitrogen, oxygen and/or sulfur,~~ where the ~~heterocyclyl~~ heterocycle ~~may be~~ is optionally mono- or disubstituted by halogen, alkyl having 1 to 4 carbon atoms, cyano, nitro ~~and/or~~ or cycloalkyl having 3 to 6 carbon atoms,

R^2 represents hydrogen or alkyl having 1 to 4 carbon atoms, or

R^1 and R^2 together with the nitrogen atom to which they are attached represent a saturated or unsaturated heterocyclic ring having 3 to 6 ring members, where the heterocycle may contain a further nitrogen, oxygen or sulfur atom as ring member and where the heterocycle ~~may be~~ is optionally mono- to tri-substituted ~~substituted up to three times~~ by fluorine, chlorine, bromine, alkyl having 1 to 4 carbon atoms ~~and/or~~ or haloalkyl having 1 to 4 carbon atoms and 1 to 9 fluorine ~~and/or~~ or chlorine atoms,

R^3 represents hydrogen or alkyl having 1 to 4 carbon atoms,

R^4 represents alkenyl having 2 to 6 carbon atoms or alkynyl having 2 to 6 carbon atoms,

or

R^4 represents alkenyl having 2 to 4 carbon atoms which is substituted by carboxyl, methoxycarbonyl, ethoxycarbonyl, formyl or halogen, or

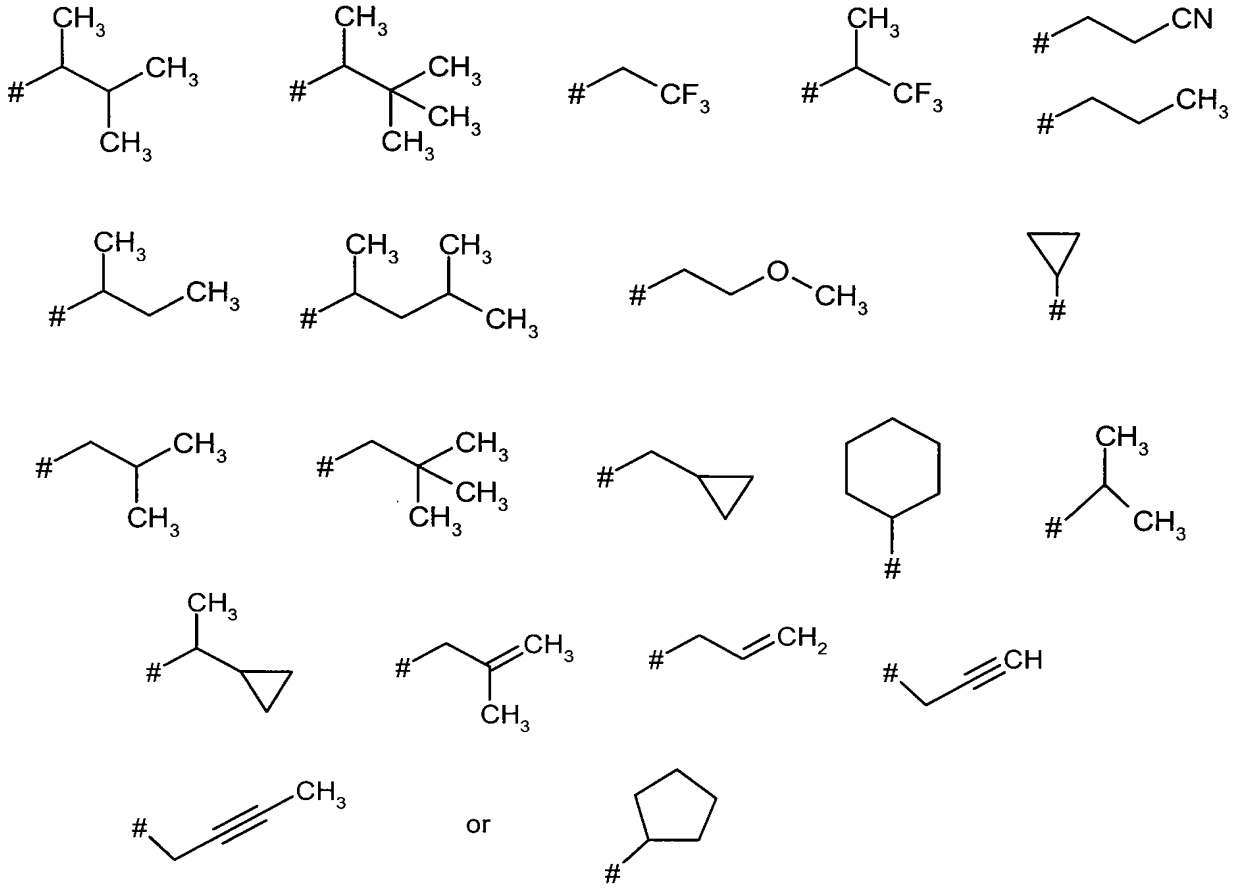
represents alkynyl having 2 to 4 carbon atoms which is substituted by carboxyl, methoxycarbonyl or ethoxycarbonyl, formyl or halogen,

R^5 represents fluorine, chlorine, bromine, ~~CN~~ cyano, alkoxy having 1 to 4 carbon atoms or alkylthio having 1 to 4 carbon atoms and

R^6 represents alkyl having 1 to 6 carbon atoms or represents cycloalkyl having 3 to 6 carbon atoms, or represents phenyl which ~~may be~~ is optionally mono- to tetrasubstituted by identical or different substituents.

3. (Currently amended) ~~The~~ A pyrazolopyrimidine ~~of the formula (I) as claimed in~~ according to claim 1 ~~or 2~~ in which

R^1 represents a radical of the formula



or

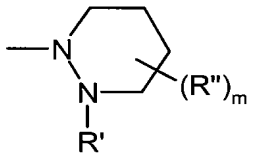
where # denotes the point of attachment, and stereoisomers thereof ~~where for those radicals which may be present in optically active form each of the possible stereoisomers or mixtures may be present~~,

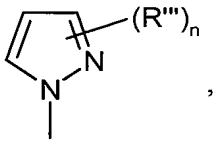
R^2 represents hydrogen, methyl, ethyl or propyl, or

R^1 and R^2 together with the nitrogen atom to which they are attached represent pyrrolidinyl, piperidinyl, morpholinyl, thiomorpholinyl, piperazinyl, 3,6-dihydro-1(2H)-piperidinyl or tetrahydro-1(2H)-pyridazinyl, where each of these radicals ~~may be~~ is optionally substituted by 1 to 3 fluorine atoms, 1 to 3 methyl groups ~~and/or~~ or trifluoromethyl,

or

R^1 and R^2 together with the nitrogen atom to which they are attached represent a radical of the formula



or


,

in which

R' represents hydrogen or methyl,

R" represents methyl, ethyl, fluorine, chlorine or trifluoromethyl,

m represents the number 0, 1, 2 or 3, where R" represents identical or different radicals if m represents 2 or 3,

R"' represents methyl, ethyl, fluorine, chlorine or trifluoromethyl

and

n represents the number 0, 1, 2 or 3, where R''' represents identical or different radicals if n represents 2 or 3,

R^3 represents hydrogen, methyl, ethyl, propyl or isopropyl,

R^4 represents straight-chain or branched alkenyl having 2 to 5 carbon atoms, where each of these radicals ~~may be~~ is optionally monosubstituted by carboxyl, methoxycarbonyl, ethoxycarbonyl, formyl or halogen, or

R^4 represents alkynyl having 2 to 5 carbon atoms, where each of these radicals ~~may be~~ is optionally monosubstituted by carboxyl, methoxycarbonyl or ethoxycarbonyl,

R^5 represents fluorine, chlorine, ~~CN~~ cyano, methoxy, ethoxy, methylthio or ethylthio,

and

R^6 represents straight-chain or branched alkyl having 1 to 4 carbon atoms, ~~represents~~ cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl, or

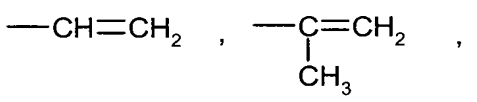
R^6 represents phenyl which ~~may be~~ is optionally mono- to trisubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, bromine, cyano, nitro, formyl, methyl, ethyl, propyl ~~n- or i-propyl~~, butyl ~~n-, i-, s- or t-butyl~~, allyl, propargyl, methoxy, ethoxy, propoxy ~~n- or i-propoxy~~, methylthio, ethylthio, propylthio ~~n- or i-propylthio~~, methylsulfinyl, ethylsulfinyl, methylsulfonyl, ethylsulfonyl,

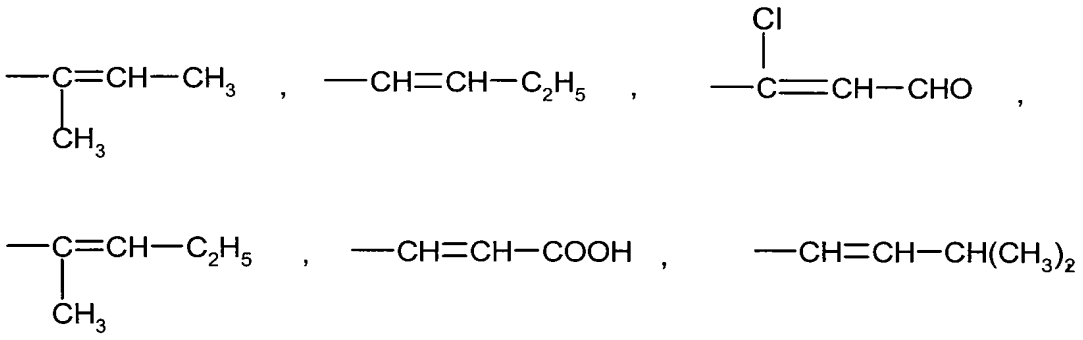
allyloxy, propargyloxy, trifluoromethyl, trifluoroethyl, difluoromethoxy, trifluoromethoxy, difluorochloromethoxy, trifluoroethoxy, difluoromethylthio, difluorochloromethylthio, trifluoromethylthio, trifluoromethylsulfinyl, trifluoromethylsulfonyl, trichloroethynyloxy, trifluoroethynyloxy, chloroallyloxy, iodopropargyloxy, methylamino, ethylamino, propylamino ~~n- or i-propylamino~~, dimethylamino, diethylamino, acetyl, propionyl, acetyloxy, methoxycarbonyl, ethoxycarbonyl, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, ethoximinomethyl, methoximinoethyl, ethoximinoethyl, cyclopropyl, cyclobutyl, cyclopentyl and cyclohexyl, 2,3-attached 1,3-propanediyl, methylenedioxy (-O-CH_2-O-) or 1,2-ethylenedioxy (-O-CH_2-CH_2-O-), where each of these radicals ~~may be~~ is optionally mono- or polysubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, methyl, ethyl, propyl ~~n-propyl, i-propyl~~ and trifluoromethyl.

4. (Currently amended) ~~The~~ A pyrazolopyrimidine ~~of the formula (I)~~ according to ~~one or more of claims 1 to 3~~ claim 1 in which

~~R^1, R^2, R^3 and R^5 have the particularly preferred meanings given above,~~

R^4 represents a radical of the formula





-CH=CH-CO-OCH_3, -CH=CH-CO-OC_2H_5, -C≡CH, -C≡C-CH_3, -C≡C-C_2H_5, -C≡C-C_3H_7, -C≡C-COOH, -C≡C-CO-OCH_3 or -C≡C-CO-OC_2H_5, and

R^6 represents methyl, ethyl, propyl, isopropyl, n-butyl, tert-butyl, cyclopropyl, cyclopentyl or cyclohexyl, or

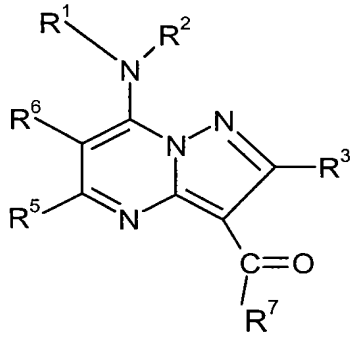
R^6 represents 2,4-, 2,5- or 2,6-disubstituted phenyl ~~or~~ , 2-substituted phenyl or ~~represents~~ 2,4,6-trisubstituted phenyl, where the substituents are selected from the group consisting of fluorine, chlorine, bromine, cyano, nitro, formyl, methyl, ethyl, propyl ~~n- or i-propyl~~, butyl ~~n-, i-, s- or t-butyl~~, allyl, propargyl, methoxy, ethoxy, propoxy ~~n- or i-propoxy~~, methylthio, ethylthio, propylthio ~~n- or i-propylthio~~, methylsulfinyl, ethylsulfinyl, methylsulfonyl, ethylsulfonyl, allyloxy, propargyloxy, trifluoromethyl, trifluoroethyl, difluoromethoxy, trifluoromethoxy, difluorochloromethoxy, trifluoroethoxy, difluoromethylthio, difluorochloromethylthio, trifluoromethylthio, trifluoromethylsulfinyl, trifluoromethylsulfonyl, trichloroethynyloxy, trifluoroethynyloxy, chloroallyloxy,

iodopropargyloxy, methylamino, ethylamino, propylamino ~~n- or i-propylamino~~, dimethylamino, diethylamino, acetyl, propionyl, acetyloxy, methoxycarbonyl, ethoxycarbonyl, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, ethoximinomethyl, methoximinoethyl, ethoximinoethyl, cyclopropyl, cyclobutyl, cyclopentyl and cyclohexyl,

2,3-attached 1,3-propanediyl, methylenedioxy (-O-CH_2-O-) or 1,2-ethylenedioxy (-O-CH_2-CH_2-O-), where each of these radicals ~~may be~~ is optionally mono- or polysubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, methyl, ethyl, propyl ~~n-propyl, i-propyl~~ and trifluoromethyl.

5. (Currently amended) A process for preparing pyrazolopyrimidines of the formula (I) ~~as claimed in~~ according to claim 1, ~~characterized in that~~ comprising

(a) reacting a ~~pyrazolopyrimidines~~ pyrazolopyrimidine of the formula



(II),

in which

R^1, R^2, R^3, R^5 and R^6 are as defined ~~above~~ in claim 1, and

R^7 represents hydrogen or alkyl

~~are reacted~~ with a phosphonium ~~salts~~ salt of the formula

$$Y_3{}^{\oplus}P\text{-}CH_2\text{-}R^8 \quad X^{\ominus} \quad \text{(III)}$$

in which

Y represents alkyl, cycloalkyl, aralkyl or phenyl,

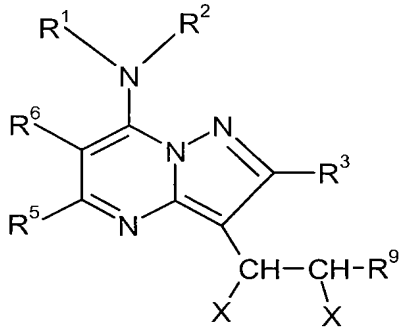
X represents an anion, such as bromide, and

R^8 represents hydrogen or optionally substituted alkyl

in the presence of a base ~~in the presence of~~ and a diluent,

or

(b) reacting a ~~pyrazolopyrimidines~~ pyrazolopyrimidine of the formula



(IV),

in which

R^1, R^2, R^3, R^5 and R^6 are as defined ~~above,~~ in claim 1,

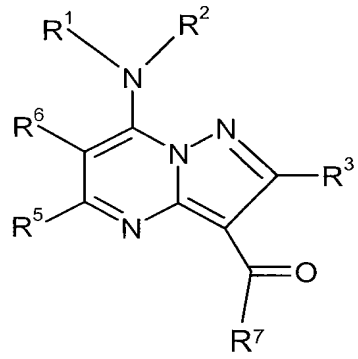
R^9 represents hydrogen or optionally substituted alkyl,

X represents chlorine or bromine

~~are reacted~~ with a strong ~~bases~~ base in the presence of a diluent,

or

(c) reacting a ~~pyrazolopyrimidines~~ pyrazolopyrimidine of the formula



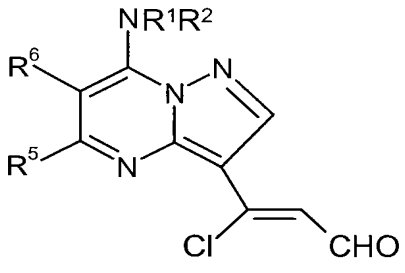
(IIa),

in which

R^1, R^2, R^3, R^5, R^6 ~~and R^7~~ are as defined ~~above~~ in claim 1, and

R^7 represents hydrogen or alkyl

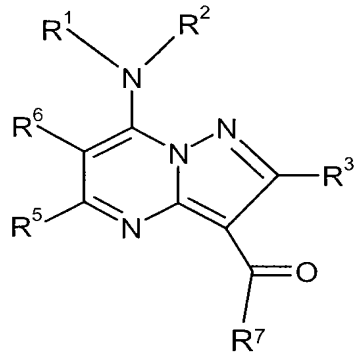
~~are initially reacted~~ with phosphorus oxychloride in the presence of dimethylformamide and ~~then further with~~ a base to give a compound of the formula (V)



(V),

or

(d) reacting a ~~pyrazolopyrimidines~~ pyrazolopyrimidine of the formula



(IIa),

in which

R^1, R^2, R^3, R^5, R^6 ~~and R^7~~ are as defined ~~above,~~ in claim 1, and

R^7 represents hydrogen or alkyl

~~are reacted~~ with a Grignard ~~compounds~~ compound

R^8-CH_2-Mg X,

where R^8 ~~is as defined above~~ represents hydrogen or optionally substituted alkyl, and then an acid. ~~acidified.~~

6. (Currently amended) A composition for controlling unwanted microorganisms, ~~characterized in that it comprises~~ comprising a mixture of at least one pyrazolopyrimidine ~~of the formula (I) as claimed in one or more of claims 1 to 4~~ according to claim 1, ~~in addition to~~ and one or more extenders ~~and/or~~ or surfactants.

7. (Currently amended) The composition ~~as claimed in~~ according to claim 6, further comprising at least one ~~further~~ fungicidally or insecticidally active compound.

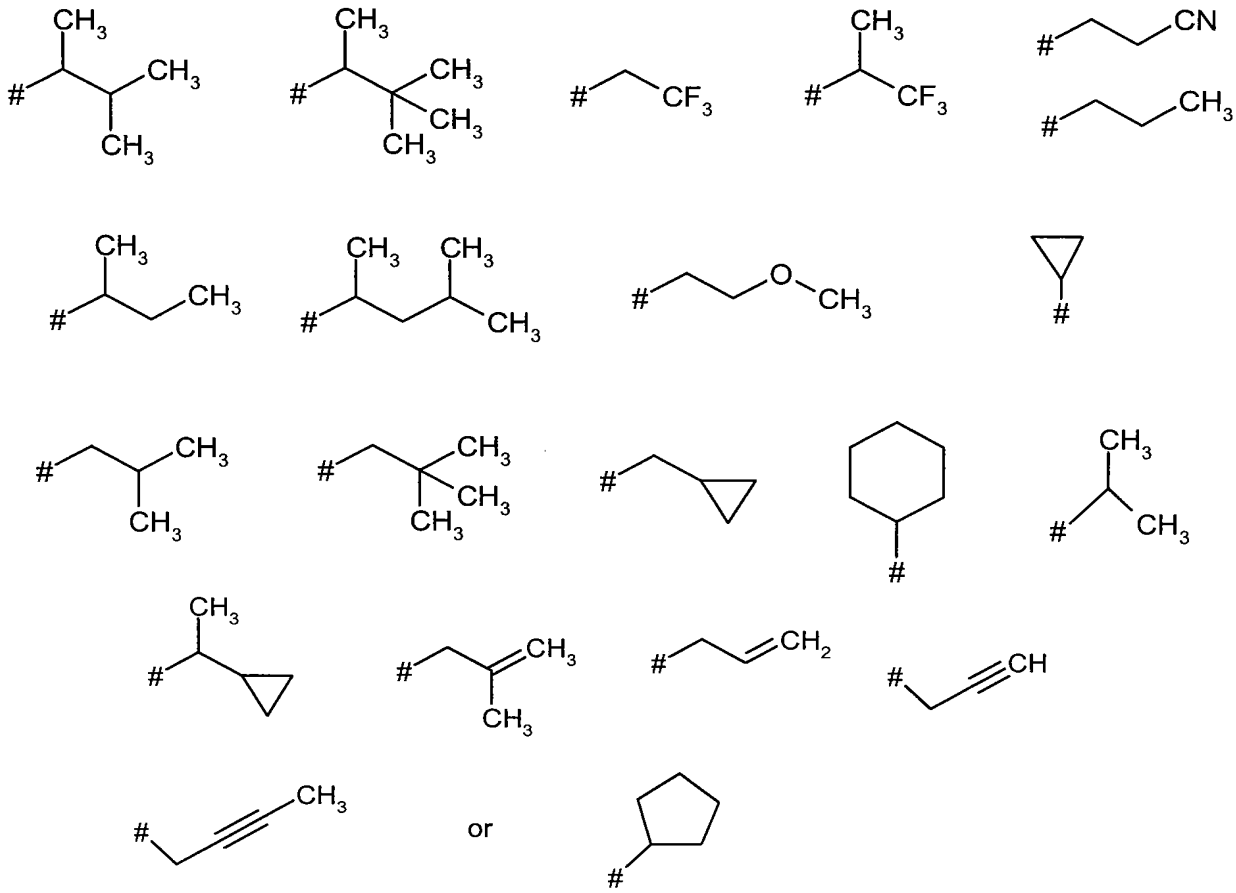
8. (Canceled)

9. (Currently amended) A method for controlling unwanted microorganisms, ~~characterized in that~~ comprising contacting unwanted microorganisms or their habitat with a ~~pyrazolopyrimidines~~ pyrazolopyrimidine of the formula (I) according to ~~one or more of claims 1 to 4~~ claim 1 ~~are applied to the unwanted microorganisms and/or their habitat~~.

10. (Currently amended) ~~The~~ A process for preparing compositions for controlling unwanted microorganisms, ~~characterized in that~~ comprising mixing ~~pyrazolopyrimidines~~ a pyrazolopyrimidine of the formula (I) according to ~~one or more of claims 1 to 4~~ claim 1 ~~are mixed~~ with an extender, surfactant ~~extenders and/or surfactants~~ or combination thereof.

11. (New) A pyrazolopyrimidine according to claim 1 in which

R^1 represents a radical of the formula



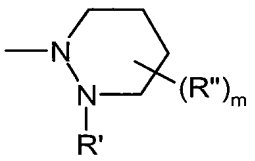
where # denotes the point of attachment and stereoisomers thereof,

R^2 represents hydrogen, methyl, ethyl or propyl, or

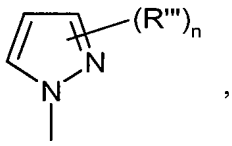
R^1 and R^2 together with the nitrogen atom to which they are attached represent pyrrolidinyl, piperidinyl, morpholinyl, thiomorpholinyl, piperazinyl, 3,6-dihydro-1(2H)-piperidinyl or tetrahydro-1(2H)-pyridazinyl, where each of these radicals is optionally substituted by 1 to 3 fluorine atoms, 1 to 3 methyl groups or trifluoromethyl,

or

R^1 and R^2 together with the nitrogen atom to which they are attached represent a radical of the formula



or



,

in which

R' represents hydrogen or methyl,

R" represents methyl, ethyl, fluorine, chlorine or trifluoromethyl,

m represents the number 0, 1, 2 or 3, where R" represents identical or different radicals if m represents 2 or 3,

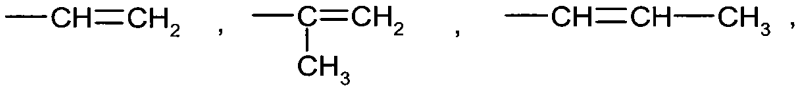
R'" represents methyl, ethyl, fluorine, chlorine or trifluoromethyl

and

n represents the number 0, 1, 2 or 3, where R'" represents identical or different radicals if n represents 2 or 3,

R^3 represents hydrogen, methyl, ethyl, propyl or isopropyl,

R^4 represents a radical of the formula



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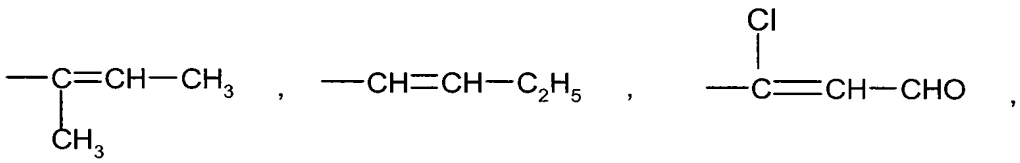

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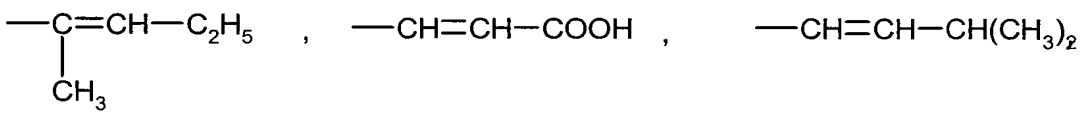

-CH=CH-CO-OCH_3, -CH=CH-CO-OC_2H_5, -C≡CH, -C≡C-CH_3, -C≡C-C_2H_5, -C≡C-C_3H_7, -C≡C-COOH, -C≡C-CO-OCH_3 or -C≡C-CO-OC_2H_5

and

R^6 represents methyl, ethyl, propyl, isopropyl, n-butyl, tert-butyl, cyclopropyl, cyclopentyl or cyclohexyl, or

R^6 represents 2,4-, 2,5- or 2,6-disubstituted phenyl, 2-substituted phenyl or 2,4,6-trisubstituted phenyl, where the substituents are selected from the group consisting of fluorine, chlorine, bromine, cyano, nitro, formyl, methyl, ethyl, propyl, butyl, allyl, propargyl, methoxy, ethoxy, propoxy, methylthio, ethylthio, propylthio, methylsulfinyl, ethylsulfinyl, methylsulfonyl, ethylsulfonyl, allyloxy, propargyloxy, trifluoromethyl, trifluoroethyl, difluoromethoxy, trifluoromethoxy, difluorochloromethoxy, trifluoroethoxy, difluoromethylthio, difluorochloromethylthio, trifluoromethylthio, trifluoromethylsulfinyl, trifluoromethylsulfonyl, trichloroethynyloxy, trifluoroethynyloxy, chloroallyloxy, iodopropargyloxy, methylamino, ethylamino, propylamino, dimethylamino, diethylamino, acetyl, propionyl, acetyloxy, methoxycarbonyl, ethoxycarbonyl, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, ethoximinomethyl,

methoximinoethyl, ethoximinoethyl, cyclopropyl, cyclobutyl, cyclopentyl and cyclohexyl,

2,3-attached 1,3-propanediyl, methylenedioxy (-O-CH_2-O-) or 1,2-ethylenedioxy (-O-CH_2-CH_2-O-), where each of these radicals is optionally mono- or polysubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, methyl, ethyl, propyl and trifluoromethyl.